REMARKS

Claims 1-30 are pending. Claims 4, 8, 9, 13, 17, 18, 20, 21, 23, 24, 26, 27, 29, and 30 have been amended. No new matter has been introduced. Reexamination and reconsideration of the application are respectfully requested.

In the February 26, 2004 Office Action, the Examiner rejected claims 1-3, 5-7, 10-12, 14-16, 19, and 22 under 35 U.S.C. §102(b) as being anticipated by Rousos et al., U.S. Patent No. 3,947,769 (hereinafter the Rousos reference). The Examiner rejected claims 25 and 28 under 35 U.S.C. §102(b) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over the Rousos reference. These rejections are respectfully traversed.

The Examiner objected to claims 4, 8, 9, 13, 17, 18, 20, 21, 23, 24, 26, 27, 29, and 30 as being dependent upon rejected base claims, but indicated that such claims would be allowable if rewritten in independent form including all of the limitations of the base claims and any intervening claims. By this amendment, the Applicant has rewritten in independent form claims 4, 8, 9, 13, 17, 18, 20, 21, 23, 24, 26, 27, 29, and 30 in accordance with the Examiner's remarks.

The Applicant believes rewritten independent claims 4, 8, 9, 13, 17, 18, 20, 21, 23, 24, 26, 27, 29, and 30 are in condition for allowance.

Independent claim 1 recites:

An adaptive slicer threshold generation system, comprising:

a first moving average filter to determine a first average value of a first binary signal;

a second moving average filter to determine a second average value of a second binary signal; and

a combiner to combine the first average value of the first binary signal and the second average value of the second binary signal to generate a combined output.

The Examiner rejected claims 1-3, 5-7, 10-12, 14-16, 19, and 22 under 35 U.S.C. §102(b) as being anticipated by the Rousos reference. The Rousos reference does not disclose, teach, or suggest the system specified in independent claim 1. Unlike the system specified in independent claim 1, the Rousos reference does not show "a first moving average filter to determine a **first average value** of a first binary signal; a second moving average filter to determine a **second average value** of a second binary signal".

Applicant respectfully submits that the Rousos reference does not teach the invention as specified in independent claim 1. The Rousos reference states "one detector 33 stores the positive peaks of the baseband signal on terminal 39A and the other detector 35 stores the negative peaks. These detectors 33, 35 have extremely long time constants, approximately 90 seconds and thus provide an essentially infinite storage time with respect to the bit rate. **Dynamic correction is made by periodic complete erasure of the peak voltages in the detectors, followed by storage of new peak values**. Specifically as described in more detail herein **the previously developed negative (-) peak voltage in detector 35 is erased immediately following the negative-going baseband signal transition of the threshold**, -- just before a new negative peak is reached, thus allowing storage of the new negative peak. Likewise, **the previously developed positive peak voltage in detector 35 is erased immediately following the positive-going transition past the decision threshold**, -- just before the new positive peak is reached, thus allowing storage of the new positive peak. This erasure of peak

detector voltage is caused by the transition of the baseband signal at terminal 29 (or 31A) by the threshold voltage then present at slicer input terminal 31B with such transition being manifest in the form of a signal developed at the slicer output terminal 31C, which signal is fed back via lead 43 to input terminals 45A and 46A of corresponding identical multivibrators 45, 46, such signals being applied to terminal 46A through inverter stage 48 and delay network 47 and to terminal 45A through delay network 49." (Column 3, lines 37-65).

The Rousos reference also states "the **threshold signal** at terminal 31B is computed using **only** the immediately preceding positive and negative peak values, **rather than an average over many bits**, and is recomputed immediately following each new transition." (Column 4, lines 15-19).

Accordingly, Applicant respectfully submits that independent claim 1 distinguishes over the above-cited reference. Claims 2 and 3 depend directly from independent claim 1. Therefore, Applicant respectfully submits that claims 2 and 3 distinguish over the above-cited reference for the same reasons as set forth above with respect to independent claim 1.

Independent claim 10 recites limitations similar to independent claim 1. Specifically, independent claim 10, recites "a first moving average filter to determine a **first average value** of a first binary signal; a second moving average filter to determine a **second average value** of a second binary signal".

Accordingly, Applicant respectfully submits that independent claim 10 distinguishes over the above-cited reference for the same reasons as set forth above with respect to independent claim 1. Claims 11 and 12 depend directly from independent claim 10. Therefore, Applicants respectfully submit that claims 11 and 12 distinguish over the above-cited reference for the same reasons as set forth

above with respect to independent claim 10.

Independent claim 5 recites:

An adaptive slicer threshold generation system, comprising:

a minimum detector to determine a minimum value of a binary one;

a peak detector to determine a maximum value of a binary zero; and

a combiner to combine the minimum value of the binary one and the maximum value of the binary zero to generate a combined output.

The Rousos reference does not disclose, teach, or suggest the system specified in independent claim 5. Unlike the system specified in independent claim 5, the Rousos reference does not show "a **minimum detector** to determine a **minimum value** of a binary one; a peak detector to determine a maximum value of a binary zero".

The Applicant respectfully submits that the Rousos reference does not teach the invention as specified in independent claim 5. As discussed above, the Rousos reference states "the **threshold signal** at terminal 31B is computed using **only** the **immediately preceding positive and negative peak values**, rather than an average over many bits, and is recomputed immediately following each new transition." (Column 4, lines 15-19).

The Rousos reference describes using the immediately preceding positive and negative **peak** values but does not describe "a **minimum detector** to determine a **minimum value of a binary one**; a peak detector to determine a maximum value of a binary zero".

Accordingly, Applicant respectfully submits that independent claim 5 distinguishes over the above-cited reference. Claims 6-7 depend directly from independent claim 5. Therefore, Applicant respectfully submit that claims 6-7

distinguish over the above-cited reference for the same reasons as set forth above with respect to independent claim 5.

Independent claim 14 recites limitations similar to independent claim 5. Specifically, independent claim 14, recites ""a minimum detector to determine a minimum value of a binary one; a peak detector to determine a maximum value of a binary zero".

Accordingly, Applicant respectfully submits that independent claim 14 distinguishes over the above-cited reference for the same reasons as set forth above with respect to independent claim 5. Claims 15 and 16 depend directly from independent claim 14. Therefore, Applicant respectfully submits that claims 15 and 16 distinguish over the above-cited reference for the same reasons as set forth above with respect to independent claim 14.

Independent claim 19 recites:

A method of generating an adaptive slicer threshold, comprising:

determining a first average value by combining a first received binary signal and a first delayed binary signal;

determining a second average value by combining a second received binary signal and a second delayed binary signal;

combining the first average value and the second average value to generate a combined output; and

setting a value of a slicer threshold within a data eye.

The Rousos reference does not disclose, teach, or suggest the method specified in independent claim 19. Unlike the method specified in independent claim 19, the Rousos reference does not show "determining **a first average value** by combining a first received binary signal and a first delayed binary signal; determining

a second average value by combining a second received binary signal and a second delayed binary signal".

The Rousos reference does not teach the invention as specified in independent claim 19. The Rousos reference states "the **threshold signal** at terminal 31B is computed using only the immediately preceding positive and negative peak values, **rather than an average over many bits**, and is recomputed immediately following each new transition." (Column 4, lines 15-19).

Accordingly, Applicant respectfully submits that independent claim 19 distinguishes over the above-cited reference.

Independent claim 25 recites limitations similar to independent claim 19. Specifically, independent claim 25, recites "determine a first average value by combining a first received binary signal and a first delayed binary signal, determine a second average value by combining a second received binary signal and a second delayed binary signal".

Accordingly, Applicant respectfully submits that independent claim 25 distinguishes over the above-cited reference for the same reasons as set forth above with respect to independent claim 19.

Independent claim 22 recites:

A method of generating an adaptive slicer threshold, comprising:

determining a minimum value of a binary one by comparing a first received binary signal with a first delayed output signal;

determining a maximum value of a binary zero by comparing a second received binary signal with a second delayed output signal;

combining the minimum value of the binary one and the maximum value of the binary zero to generate a combined output; and

setting a value of a slicer threshold within a data eye.

The Rousos reference does not disclose, teach, or suggest the method specified in independent claim 22. Unlike the method specified in independent claim 22, the Rousos reference does not show "determining **a minimum value** of a binary one by comparing a first received binary signal with a first delayed output signal; determining a maximum value of a binary zero by comparing a second received binary signal with a second delayed output signal".

Applicant respectfully submits that the Rousos reference does not teach the invention as specified in independent claim 22. The Rousos reference states "the **threshold signal** at terminal 31B is computed using **only** the **immediately preceding positive and negative peak values**, rather than an average over many bits, and is recomputed immediately following each new transition." (Column 4, lines 15-19).

Accordingly, Applicant respectfully submits that independent claim 22 distinguishes over the above-cited reference.

Independent claim 28 recites limitations similar to independent claim 22. Specifically, independent claim 28, recites "determine a minimum value of a binary one by comparing a first received binary signal with a first delayed output signal, determine a maximum value of a binary zero by comparing a second received binary signal with a second delayed output signal".

Accordingly, Applicant respectfully submits that independent claim 28 distinguishes over the above-cited reference for the same reasons as set forth above with respect to independent claim 22.

Applicants believe that the foregoing amendment and remarks place the application in condition for allowance, and a favorable action is respectfully

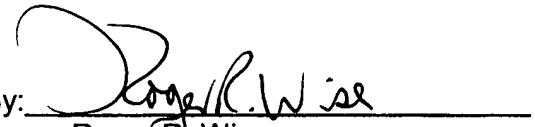
requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles telephone number (213) 488-7100 to discuss the steps necessary for placing the application in condition for allowance should the examiner believe that such a telephone conference would advance prosecution of the application.

Respectfully submitted,

PILLSBURY WINTHROP LLP

Date: May 20, 2004

By: 

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